United Nations Industrial Development Organization

Distr.
LIMITED

ID/WG.315/1
29 November 1979

ENGLISH

Seminar on Forms and Impacts of Redeployment
of Industries to Developing Countries
Vienna, Austria, 20 - 21 September 1979

REDEPLOYMENT OF INDUSTRIES FROM DEVELOPED TO DEVELOPING COUNTRIES: ITS SCOPE AND APPLICATION TO KENYA *

by

J.G. Karuga**

* The views expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

** Director of Industries, Ministry of Commerce and Industry, Nairobi, Kenya.

id.79-9583

C O N T E N T S

	Page
INTRODUCTION	1
PART ONE - THE KENYAN SITUATION	1
I Kenya's Manufacturing Sector	1
II Kenya's Industrial Policies	4
III Industrial Development Objectives	5
IV Industrial Development Measures	7
V Strategic Industries and Foreign Investment	8
PART TWO - REDEPLOYMENT AND ITS APPLICATION TO KENYA	9
I The Concept of Redeployment	9
II Scope for Redeployment in Kenya	12
III Conclusion	14
ANNEXES	15

The views expressed in this paper are those of the author and do not necessarily represent the official view of the Government of Kenya.

INTRODUCTION

1. Every so often in the development of economic thought a concept emerges embodying classical principles of economics, yet at the same time symbolising a global movement towards solutions of structural problems in the world economy. Global and international efforts towards restructuring the world economy within the framework of the New International Economic Order have focussed attention on such concepts as "self-reliance", "basic needs", and "global interdependence". In the field of industrial development and international industrial co-operation, the concept of "redeployment" of industries from the developed to developing countries seems to be gaining momentum - indeed, the very fact that we are gathered here to discuss the subject, is evidence of the growing importance which the international community attaches to it.

2. Yet one may pause and ask, what is the essence of redeployment? What is its potential as a tool for restructuring the global economy towards a more equitable sharing of the global national product? What is the scope for national development through "redeployment"?

3. These are fundamental questions which this seminar will address itself to; and I cannot pretend to answer them in full. The objective of this paper is to examine the concept of redeployment in the context of Kenya's industrialisation. However, before we do so, we shall present a brief description of Kenya's industrial structure, policies and programmes as background to our discussion.

PART ONE

THE KENYAN SITUATION

I. KENYA'S MANUFACTURING SECTOR

4. The manufacturing sector ranks second to agriculture in the economy and contributes about 15% of the GNP of the country. The sector also employs about 15% of the labour force and is currently the fastest growing sector of the economy having averaged a growth rate of more than 10.5% p.a. over the last eight years - a rate twice as fast as the overall rate of growth of the whole economy. In 1978, the manufacturing sector achieved a growth rate of 14%, largely due to the expansion of domestic demand as a result of high coffee and tea prices in 1977. It is projected that the sector will grow at the rate of 9% p.a. during the next plan period, that is, 1979-83. At this

rate the manufacturing sector will be the main engine of growth of the Kenya economy between now and the year 2000.

5. Like in most other developing countries, Kenya's manufacturing sector is characterized by a preponderance of food processing and the manufacture of simple consumer goods. However, as Table 1 below shows, Kenya's industrial sector is relatively diversified with chemicals and basic metal industries contributing nearly 15% each to the total manufacturing output.

TABLE 1

DISTRIBUTION OF MANUFACTURING SECTOR'S GROSS DOMESTIC PRODUCT, 1968-76

(Current Price) K£'000

Industry	1968	1976	Percentage Share in Total 1968	1976
Manufacture of food, beverages and tobacco	13,596	73,70	33.7	43.1
Manufacture of textiles, wearing apparel and leather industries	5,65	15,941	13.4	9.7
Manufacture of wood and wood products including furniture	2,758	6,134	6.1	3.4
Manufacture of paper and paper products, printing and publishing	3,453	14,673	7.6	8.0
Manufacture of chemicals and chemical products, petroleum, coal, rubber and plastic products	7,031	27,016	15.4	14.7
Manufacture of non-metallic mineral products, except products of petroleum and coal	2,694	9,676	5.9	5.3

(continued)

TABLE 1 (contd.)

Industry	1967	1976	Percentage Share in Total 1967	1976
Manufacture of basic metal industries, fabricated metal products, machinery and equipment	13,355	29,115	29.7	15.9
Other manufacturing industries	113	1,761	0.3	0.9
	45,559	183,574	100.0	100.0

Source: Kenya National Development Plan, 1979-83, page 327.

Although some of the most developed manufacturing sub-sectors comprise resource based industries, the sector as a whole still remains very import dependent. As can be seen from Table 2, nearly 50% of the national import bill is accounted for by capital and intermediate goods Machinery and capital equipment account for

TABLE 2

IMPORT DEPENDENCE OF MANUFACTURING SECTOR

(in K£)

Year	Output	IMPORTS: Intermediate Consumption	Capital Formation	Total Intermediate and Capital	% Share of (2) in (1)	(3) in (1)	(4) in (1)
	1	2	3	4	5	6	7
1966	136,898,900	50,452,368	17,791,521	68,143,789	36.8	12.9	49.8
1967	154,936,000	53,896,395	23,600,605	77,496,990	34.8	15.2	50.0
1968	163,851,600	57,982,337	20,099,797	78,082,134	35.4	12.3	47.7
1969	186,892,970	60,839,261	20,932,330	81,771,599	32.6	11.2	43.8
1970	266,601,890	72,888,791	28,712,497	101,535,210	36.3	14.3	50.6
1971	251,145,583	95,001,600	36,703,936	131,705,536	37.8	14.4	52.3
1972	301,867,439	85,097,900	42,481,075	127,578,975	28.2	14.1	42.3
1973	368,340,282	112,086,317	46,145,159	158,231,476	30.4	12.5	43.0
1974	550,591,579	209,106,078	46,585,044	255,691,122	38.0	8.5	46.4
1966-68	455,686,500	162,302,980	61,491,923	223,794,903	35.6	13.5	49.1
1972-74	1,220,794,300	406,290,295	135,211,278	541,501,573	33.3	11.1	44.4

SOURCE: Kenya National Development Plan, 1979-83, page 330.

approximately 20% of all imports and intermediate industrial supplies account for 30%.

6. The rapid rate of growth of manufacturing means that the demand for imported intermediate inputs will continue to grow equally rapidly. Thus, although industrialisation appears to be the main impetus to growth of the Kenyan economy, this dependent development is likely to encounter severe foreign exchange and balance of payments problems in the future unless corrective measures are taken well in advance.

II KENYA'S INDUSTRIAL POLICIES:

7. The fact that only 15% of Kenya's imports consists of consumer goods is testimony of the past policies of import substitution in the manufacturing sector. Thus the scope for further industrialisation along the lines of import substitution is limited - the relatively easy forms of industrialisation have already been undertaken; and the main task now facing the manufacturing sector is to move towards the substitution of intermediate and capital goods as well as production for exports. This is no mean task, given the relatively young industrial structure of the country. But, to use the words of our Vice/President the age of easy options in Kenya is over and we must face the realities of international competition and cooperation.

8. In the past 15 years of independence, Kenya has pursued a mixed economy policy wherein the public and the private sectors co-exist. Although the government has encouraged the private sector to play a significant role in the economy, the public sector in Kenya plays a critical role in the economic tempo of the country. The major investment institutions are publicly owned; and so are the commercial banks. Kenya's approach to foreign investment has been characterised as liberal; but again, there is hardly any major industrial venture in which the government does not have a stake, either through equity participation or loans. Kenya recognises that for faster industrial growth, she must borrow technology and expertise from the developed countries and for this reason, she has continued to encourage joint-ventures between foreign private (or public) institutions and Kenyan entrepreneurs. Because Nairobi acts as a regional centre for many international firms operating in Africa, the impression is created that Kenyan industry is entirely foreign owned. It is precisely because of the realisation of this fact that the Kenyan government has created various industrial development institutions as well as instituted measures

designed to increase the rate of participation of Kenyans in the manufacturing sector. Such institutions as the Industrial and Commercial Development Corporation (ICDC); the Industrial Development Bank (IDB); the Development Finance Company of Kenya Ltd. (DFCK) and the Kenya Industrial Estates (KIE) programme all contribute to the promotion of industrial development in Kenya by Kenyans.

9. During this early phase of industrialisation, Kenya adopted measures such as tariff protection; quantitive restrictions and administrative procedures all designed to protect domestic enterprises from international competition. Most observers of this regime of industrial protection are however agreed that the system of protection has been costly; ineffective in certain areas and generally inefficient in its impact on domestic resource allocation. The incidence of such protection has often been unrelated to economic objectives such as increased exports, greater local value added or increased employment. So long as most enterprises were operating under the import substitution regime of industrialisation, this system of protection suited their needs - in situations where capital should have been costly, it was made cheaper by a combination of tariff, fiscal and exchange rate policies which tended to favour more capital intensive production methods. Because of the high levels of protection, domestic firms were able to operate profitably at ridiculously low levels of capacity utilization and to concentrate on sectors of the economy which have minimal backward or forward linkage effects. The result is that although the Kenyan economy is relatively more diversified than many other African countries, structurally it remains weak for the purposes of the new phase of industrialisation called for in paragraph 7 above.

III INDUSTRIAL DEVELOPMENT OBJECTIVES:

10. The current development plan (1979-83) recognises this weakness of the manufacturing sector, and in the next ten years, it is proposed to pursue the following objectives in the manufacturing sector:

(i) Reduction of Dependence on Foreign Inputs (Resource based Industries)

Concerted efforts will be made to reduce the foreign content of manufactured goods. This will be achieved by placing higher priority on the development of industries having local comparative advantage; i.e. those industries using local resources and technology.

(ii) Creation of Employment Opportunities:

In the past, the growth of employment in the manufacturing sector has not kept pace with the growth of output in the sector. In the future, more emphasis will be laid on employment creation through more appropriate choice of technology; promotion of small scale rural and urban informal sector enterprises; differential investment allowances based on the cost of creation of one job, and more critical evaluation of projects. It is expected that a total of 50,000 new jobs will be created in the sector during the plan period.

(iii) Kenyacization of the Sector:

This will take the form of greater support of Kenyans entering the manufacturing sector through provision of financial and managerial assistance, participation of national financial institutions in joint-ventures and employment of Kenyans in managerial and technical positions.

(iv) A diversified pattern of industrialisation is desirable for the purposes of meeting all the needs for manufactured goods in the economy as well as exports. Existing industries will be encouraged to expand, particularly in the production of intermediate goods.

(v) Efficien y:

Efficiency in the utilisation of local resources and installed capacity will be encouraged through a gradual dismantling of protective barriers to competition. In particular, tariffs will be rationalized and duty concessions to infant industries gradually phased out. No new industries during the coming years will enjoy infant industry status and protection for more than five years. Furthermore, concessions on the grounds of infant industry will not be automatic but will only be granted after thourough scrutiny by the Industrial Protection Committee.

(vi) Production for Exports:

The government will provide appropriate assistance to local industries to enter the international market. This will entail:

(a) strengthening the Kenya External Trade Authority (KETA) the main governmental body responsible for the promotion of exports;

(b) implementing an Export Credit Guarantee Scheme;
(c) establishing more export houses;
(d) rationalizing the present system of export incentives with a view to rewarding export performance particularly for resource-based and labour-intensive export industries.

(vii) Dispersion of Industries to all regions of the country:

Geographically, 80% of the manufacturing enterprises are located in the two cities of Nairobi and Mombasa. It is the policy of the government to encourage greater dispersal of industries to smaller urban and rural areas through such measures as:

(a) promotion of foot-loose industries in smaller towns;
(b) promotion of resource-based industries in rural areas;
(c) differential investment allowance on a sliding scale depending on the size of the location of industries;
(d) provision of more and better infrastructural facilities such as roads, water, electricity and housing in rural areas;
(e) better extension services to industries in rural areas.

IV INDUSTRIAL DEVELOPMENT MEASURES:

11. To achieve these objectives, the government will, in addition to the above measures, undertake the following:-

(i) Inventory of Projects:

In order that the manufacturing sector develops in accordance with the desired pattern, it is essential to have an inventory of existing and proposed projects. To identify such projects detailed feasibility studies will be undertaken by the Department of Industries in the Ministry of Commerce and Industry.

(ii) Project Evaluation:

New projects will be rigorously evaluated to ensure that they conform to the above objectives. Only those projects which meet the following criteria will be encouraged:

(a) assured domestic and export market prospects;
(b) good economic and financial rate of return;
(c) low capital cost (high labour content);
(d) appropriate technology;

(e) suitable management and marketing arrangements i.e. no unduly heavy royalty charges and fees;
(f) appropriate training programmes;
(g) neutral environmental effects.

V STRATEGIC INDUSTRIES AND FOREIGN INVESTMENT

12. This rigorous evaluation of projects however, does not mean that foreign investment will not be welcome in Kenya. Foreign investment will continue to be welcome particularly in those areas of high technology requiring large amounts of investments. Small scale industries, however, will be reserved mainly for local investors. Whereas in the past the government made substantial investments in the manufacturing sector, during the coming years the government will be less directly involved in investments. Its role will comprise promotion of industrial development through the creation of a favourable climate for private investments both local and foreign; identification of new investment opportunities; finding partners for foreign investors in the country; assisting local investors in the preparation of pre-feasibility and feasibility studies as well as providing extension services and infrastructure.

13. The government will however play a direct role in the promotion of basic and strategic industries, provided they are proven to be internationally competitive. Such industries as steel, machinery, heavy chemicals and machine tools are the foundation stone of industrialisation and for this reason, the government will be directly involved in their promotion. Annex 1 gives a complete picture of the envisaged projects in the next five years, indicating the particular role of the private and public sectors in each project.

14. The success of the above policies and programmes will however, depend to a large extent on the international climate for industrial co-operation of which the subject matter of this seminar, namely, redeployment of industries from the developed to the developing countries is a facet. The next part of the paper discusses this concept in the content of Kenya's industrial objectives, policies and programmes as outlined in the preceding section. After a brief conceptual analysis of the phenomenon, an attempt is made to relate the scope of the concept of redeployment to Kenya's industrial experience and potential.

PART TWO

REDEPLOYMENT AND ITS APPLICATION TO KENYA

THE CONCEPT OF REDEPLOYMENT:

15. The concept of "redeployment" has as its paradigm the classical theory of comparative advantage. In a global economy where factors of production have been allocated in accordance with the principles of comparative advantage, there would be no need for redeployment. The movement towards redeployment of industries from the developed to the developing countries is therefore a manifestation of the fact that the global economy is structurally in disequilibrium, and therefore operating suboptimally in so far as maximisation of global benefits from industrialisation are concerned. To restore equilibrium, factors must be so redeployed as to maximise marginal returns.

16. The global economy, however, is not static but dynamic. Changes in factor endowments and productivity are always occuring, and redeployment must therefore be seen as a structurally dynamic process which attempts to restore the system towards a long term equilibrium where benefits from industrialisation are optimized. In the short run, however, redeployment as such will not solve global problems of inequalities in distribution of benefits from industrialisation. In the short run and medium term, various countries stand to loose or gain in accordance to the level of their industrialisation. In those developed countries where there has been secular deterioration in comparative advantage there will be short term losses in terms of jobs and social welfare - the effects of which must weigh heavily in a national restructuring of the economy to fit into a new global economic order based on dynamic comparative advantage. So although in the long run there should be identity of interests between developed and developing countries through redeployment of industries based on a more rational division of labour and utilisation of resources, in the short run there will be controversy as to who benefits and by how much.

17. From the point of view of developing countries, the process of redeployment should in theory result in short term gains in welfare. But the conditions for operational success of the process will of course differ from country to country and will depend to a large extent on the forms and modalities which the process takes as well as on other structural realjustments in the global economy.

18. To succeed at the national level, redeployment must be coupled with the development of adequate infrastructure, skills and complementary raw materials as well as technology. Industries transferred from the developing countries must thus be adaptable to the local environment in a manner which positively contributes to national welfare. The transfer of obsolete machinery and industries must therefore be resisted because although in the short run they may add to a country's capacity to manufacture certain items, they may in the long run result in a drain on that country's foreign exchange. In addition, redeployment must not be seen merely as a process of relieving developed countries of archaic industries: it must be conceived in a dynamic manner with transfers of certain advanced industries taking place as well. There are indications that for certain industries, the developing countries may have a skill (as opposed to labour) advantage over developed countries, and for this reason many processes in such industries as electronics could be located in developing countries from the very beginning. In other words redeployment must take the form not only of moving resources out of declining industries in the developed countries, but also of supporting those industries in the developing countries with a clear comparative advantage over similar enterprises in the developed countries.

19. Because redeployment involves differential costs and benefits between developed and developing countries, there will be resistance in the North against moves to locate industries in the South. Trade union pressures and sheer chauvinistic sentiments will make the process of adjustment in the North more costly and longer than would be globally optimal. For this reason, it is essential that globally agreed principles are applied in the process to minimize social dislocation in the North. These must, as indicated above, include incentive measures to new industries to locate in developing countries as well as cushioning measures to ease industrial dislocation in the North.

20. The prospects of success of the process, however, will critically depend on to what extent the international community is able to link measures in redeployment to reforms in other spheres of international co-operation. In particular, the success of the process will depend on the degree of concurrent trade liberalization in the world economy. For many developing countries, redeployment will remain meaningless unless it is coupled to access to markets of developed countries for manufactured items from developing countries. This is the key to the whole process: with limited markets

at home, additions to capacity in either traditional import substitution or export oriented production will remain mere white elephants for many developing countries. This is an area where we believe that governments of the developed countries have a major role to play in opening up their markets to manufactured items from developing countries.

21. Developed country governments must also undertake measures to liberalise access to technology by developing countries so that whatever labour comparative advantage exists in these countries may be transformed into a skill advantage as well. The success of redeployment will thus depend upon what measures are taken at the global level to base the restructuring of the economy upon skills and resources rather than mere human labour. Developing countries will continue to oppose any programmes which interpret the readjustment process as consisting of the perpetuation of a colonial type economy where third world countries are relegated to menial operations.

22. The modalities which redeployment takes will also determine its success as an instrument for restructuring the global economy within the framework of the New International Economic Order. If redeployment is construed as an instrument for international industrial cooperation then it is inevitable that all governments will have a role to play in the process. International adjustment measures must be agreed upon and mechanisms and institutions created to implement internationally agreed programmes of action in this area. Different governments will, however, play different roles depending on their social philosophies. But no government can take a neutral stand in this issue.

23. For many of the developed market economies, the transnational corporation will, however, play a very active role in this process. It is after all, the TNCs which control much of the technology and trade of the world and for this reason structures must be created at the international level which take account of this fact. For socialist countries, state agencies will no doubt continue to be directly involved in the process whereas in the developing countries a variety of forms of collaboration can be expected.

24. Lastly, it is important to note that there will be forces opposed to redeployment, so that the scope for restructuring the world industrial sector will be somehow limited. Because of different secular trends and effects of inflation, there will be tendencies to

resist redeployment in times of global recession. In addition, technological changes towards more labour saving techniques and other modifications of processes may militate against the process.

II SCOPE FOR REDEPLOYMENT IN KENYA:

25. Kenya's industrial policies and strategies have been outlined in Part One. We now consider the scope of redeployment in Kenya in the light of those policies and in the context of the above conceptional analysis.

26. As indicated in Part One, the easy options in Kenya's industrialisation are now over. Kenya must move into an industrialisation phase which involves manufacture of more intermediate inputs as well as capital goods. Kenya must also develop industries which are resource based as well as production for exports. It is in these sectors that Kenya can hope to benefit from redeployment.

(i) Capital Goods and Intermediate Inputs:

27. As far as this sector is concerned, Kenya already has several projects in the pipeline for consideration. These include the establishment of a mini-steel plant (approximately 300,000 tons) in collaboration with Swaziland and other steel producers in the world. The limiting factor in this case however is the fact that Kenya has neither the raw materials nor the energy - hence the need to collaborate with Swaziland which has iron ore resources. The supply of energy on the scale required for this project is however the most critical constraint to the success of this project. Negotiations are still going on to find out the most economical way of providing such power and the technical know-how to make the project viable. In the meantime, it is realized that developments in oth r areas of engineering must go on; and in this regard, the establishment of various types of foundries and metal working industries is envisaged in various parts of the country in the coming ten years.

28. A machine tools project has already been signed with Hindustan Machine Tools (HMT); and will be implemented soon. Other industries in this field are being encouraged to diversify and the scope for such activities is particularly favourable because of the regional market for such engineering services in neighbouring countries. On the whole, the nucleus of domestic capability to make redeployment in this sector succesful exists and all that is required is further integration and training of skilled manpower.

Because this sector will be largely nationally and regionally oriented, the limiting factors of a small market are not critical for its success.

29. In the area of industrial chemicals, there are plans for producing various products from national resources such as soda ash as well as from sugar cane. The rise in oil prices has made it possible to revive some of the older technology in the production of basic plastic raw materials, and one can foresee brighter prospects for this kind of redeployment. However, questions of scale of operations limit the prospects for major breakthroughs in this area, unless projects are conceived on a regional plane. Also it is doubtful that the plant and equipment for this kind of operations will be cheap to fabricate even in Europe, given that this is an area where synthetics have taken over for quite some time. But again, changes in relative prices of feedstock from petroleum and organic substances may revive the sector as a whole and make developments in this field viable once more. Another limiting factor in this area is likely to be the availability of land - not many developing countries have a favourable land/man ratio to make developments along these lines potentially beneficial.

(ii) Resource Based Industries:

30. The potential for redeployment exists in resource based industries such as food processing, timber, textiles and leather products. Climatic conditions in Kenya make it possible to grow a variety of agricultural products, both tropical and temperate, and, as can be seen from Table 1, food processing is one of the areas where Kenya could be said to have industrial potential. The processing of fruits and horticultural products is potentially only limited by the small domestic markets. If access to markets of developed countries could be assured, this is a sector where meaningful redeployment could take place. In the area of timber based industries, the potential exists for combining developed country technologies (particularly from Italy, Scandinavia and other European countries) and local skills to produce for the lucrative Middle Eastern markets. The same applies for textiles and leather goods, although these two sectors would have to rely greatly on favourable access to the markets of Western Europe and developed socialist countries. The scope for skill intensive production for export in such fields as electronics is still rather limited as far as Kenya is concerned.

III CONCLUSION:

31. All in all, the possibilities for redeployment in Kenya exist in many areas of industries: but scope for successful redeployment is limited by the size of the market, technological scale and domestic skills. Kenya's mixed economy policy does not preclude any forms of redeployment - whether through state bilateral co-operation or through direct foreign investment. Neither does Kenya's pragmatic development philosophy preclude redeployment from any particular country - so long as the terms and conditions of any such deal are evaluated and found to have a national positive net economic impact, such redeployment will be welcome. The different incentives offered to various projects in the framework of redeployment will depend on the extent to which the project reinforces the industrial objectives set out in Part One. What is of primary significance for us in Kenya is that whatever international measures and mechanisms are designed to implement programmes of redeployment, they must positively contribute to our capacity to satisfy the basic needs of our people while at the same time participating effectively in international trade and industrial co-operation.

ANNEX I

Industrial Group and Project	Total Investment K£'000	Private Investment K£'000	Public Investment K£'000	General Remarks
FOOD, BEVERAGES AND TOBACCO				
1 Uplands bacon factory	160	160	-	Planned expansion for canning
2 Processinng of slaughter house wastes	500	500		Investigation being carried out on further processing of slaughterhouse wastes
3 Poultry plants	1,500	1,500		Investment planned by a local firm
4 Others like new abattoirs bouillon cubes manufacture plants etc	2 780	2,780		Investment in new abattoirs, in new bouillon cubes manufacture plants, etc
5 Kenya Co operative Creameries:				
(a) Expansion of capacity	3 330		3 330	The present capacity in Mombasa and Nairobi will be expanded
(b) New plant I	3 000		3 000	New plant for processing milk in Mombasa
(c) New plant II	100		100	New plant for processing milk in Nanyuki
(d) U F T milk plant	10		10	Installation of silo tank system in Nakuru
(e) Milk powder plant	500		500	Extension of butter making plant in Kitale
6 Instant coffee	200	200		The project is being sponsored by a private firm and is highly export oriented To be located at Thika
7 Cassava processing plants	1 000	1 000		Two cassava processing plants will come up at the Coast during the plan period
8 Fruit processing plant	2 500	2 500	-	This project will commence production towards the end of the plan period in the Upper Tana Basin (Meru District)
9 Horticultural crops processing plant	1,400	1,400	-	This proposed plant will process about 50,000 tons a year of fresh horticultural products in the Sagana-Embu area
10 Pineapple processing plant	2,000	2.000		A new plant will be established along with the expansion of the existing ones

11	Mango canning plan	1 000	1 000	The project aims at processing fruits grown at the Kenyan Coast but mainly mangoes to produce slices in syrup pulp jam etc ICDC plans to participate in equity in the project to the tune of K£250 000
12	Mushroom processing plant	1 000	1 000	To be established at Eldoret or Thika
13	Other canning preservation of fruits and vegetable projects	570	570	Potential small scale projects
14	Processing of fish	37	37	A fish meal and fish oil plant will be built during the plan ICDC is interested in investing in this plan
15				
15	Fats and edible oils	2 840	2 840	Investment plans by an existing firm
16	Grain mill products			
	(a) Flour mills	9 000	9 000	Mainly expansion of capacity by existing plants at Kisumu, Nairobi and Mombasa and also two new maize mills at Naivasha and Kakamega
	(b) Small scale grain milling units and rural posho mills	2 176	2 176	These new mills will be promoted by the KIE RIDC IPA programme
17	Rice mill plant	2 000	2 000	Installation of new plant at Kisumu
18	Bakery projects			
	(a) New plants	2 200	2 200	During this plan three new medium sized bakeries will be established at Kiganjo Molo and Kisumu
	(b) Expansion of existing capacity	400	400	Existing bakeries have plans for expansion
	(c) Small scale rural bakeries	510	510	Supported by ICDC through KIE programme
19	Sugar factories and refineries			
	(a) New sugar plants	30 000*		Two new sugar factories are under construction in Buromeland South Nyanza Districts
	(b) Expansion of existing capacity	4 000*		The Mumias factory will expand its capacity from 70 000 to 156 000 tonnes
	(c) Rehabilitation programme	10 000	10 000	This will cover Miwani Muhoroni Chemelil and Ramisi sugar factories

	(d) Others	500	500	The Government will also assist the establishment of a number of mini-sugar plants These are likely to be promoted by the KIE and ICDC
)	Cocoa chocolate and sugar confectionery (a) New plant	55	55	A new sweets plant will be erected in the Nairobi area
	(b) Expansion of capacity	150	150	Expansion and diversification programme of existing firms to cater for the increase in demand
21	Other food products	1 730	1 730	Investment will include processing of tea coffee roasting, edible salt refining, cashewnut processing plant etc
22	Manufacture of prepared animal feeds	550		Potential project
23	Distilling rectifying and blending of spirits	83	83	It is proposed to investigate local production of concentrates and rum from molasses
24	Malt liquors and malt (a) New plants	8 300	8 300	A new plant to be located at Kisumu
	(b) Expansion of Capacity	13 000	13 000	Substantial expansion of the existing capacity to supply increasing local demand and for export
25	Manufacture of soft drinks (a) New plant	1 000	1 000	Proposal to establish 3 soft drink plants in Nakuru Machakos and Voi ICDC is expected to invest in some
	(b) Expansion of capacity	117	117	Planned expansion of capacity by established firms in the industry in order to keep pace with the growing consumption of soft drinks
26	Tobacco manufacture	861	861	Expansion programme

TEXTILES' WEARING APPAREL
AND LEATHER INDUSTRIES

27 Spinning weaving and finishing textiles			
(a) Synthetic Yarn Project I	6 000*		It will commence production in the early part of the plan Government is participating through ICDC
(b) Synthetic Yarn Project II	15 000		To be located at Nanyuki; it will produce polyester staple fibre and texturized filaments staple yarn
(c) Expansion	1 000*		Expansion of capacity by E A Fino Spinners through ICDC
(d) Others including small scale weaving units	5 325	5 325	Small scale units in an industrial estate will produce specialized fabrics which are uneconomical for large units
28 Knitting plants	2 035	2 035	Investment for the purpose of balancing the utility equipment in various processing stages of the industry
29 Cordage rope and twine			
(a) Polypropylene bags	1 000	1 000	New plant to produce synthetic bags as the demand for bags cannot be met by the existing capacities
(b) Expansion of capacity	610	610	Modernization and expansion of existing capacity
30 Cotton ginning and ginneries	205	205	While the existing capacities will be fully utilized the ones in the Coast and Nyanza Provinces will be supplemented

31	Wearing apparel			
	(a) Garment plant	1 430	1,430	Expansion programmes of existing garment factories
	(b) Suiting project	100	100	Potential project
	(c) A new outerwear plant	1 000	1,000	Potential project Government will participate through ICDC
32	Tanneries leather finishing and leather goods	2 233	2 233	Expansion of the existing capacities as well as four new tanneries in the pipeline Government may participate through ICDC and IDB
33	Manufacture of footwear			
	(a) Expansion of the existing capacity	700	700	To be undertaken by an established firm
	(b) A new shoe factory	1 000	1 000	To be located at Voi
	(c) Others	635	635	At least seven medium and small-size units will be established during the plan within the KIE Programme
	WOOD AND WOOD PRODUCTS INCLUDING FURNITURE			
34	Sawmills planning and other wood mills			
	(a) New projects	2 000	2 000	Two new mills to be established at East Mt Kenya and Transmara area
	(b) Improvement of existing capacities	210	210	Some of the existing mills will improve the utilization of their existing capacity
35	Printing publishing and allied industries:expansion of capacities	1 800	1 800	The existing units have plans for expansion
36	Wooden containers and wood products including carvings wood and cork	64	64	The investment is likely to be higher than indicated here

(c) Sulphuric acid and aluminium sulphate	400	400	Expansion of existing capacity to meet growing demand
(d) Others: hydrogen peroxide sodium sulphate and zinc oxide	600	600	Potential project
41 Manufacture of fertilizer and pesticides			
(a) Fertilizer plant	15 000		Potential project to manufacture fertilizers with Government participation
(b) Small scale units	500	500	For granulating and compounding fertilizers
(c) Basic insecticides: fenethion diazinon malathion and diamethon	3 300		Potential project
42 Pyrethrum extraction	1 100	1 100	The processing and the use of pyrethrum extract in an end product for export will be investigated
43 Synthetic resins plastic materials man made fibres including wattle bark extraction			) All potential projects In some of them the) Government will participate through ICDC
(a) Cashewnut shell liquid (CNSL)	250	250	)
(b) Polyester Resin	100	100	)
(c) Low density polythylene from agrobased raw material	1 400	1 400	)
(d)Polypropylene fabrics	1 000	1 000	)
44 Paints varnishes and lacquers	147	147	Investment in this industry will be of small nature as there is an unutilized capacity ranging between 40 to 50 per cent

45.	Drugs and medicines				
	(a) Expansion of capacity	350	350	-	Small manufacturing units have plans to expand.
	(b) Fenugreek processing	2,000	2,000	-	Potential project in Kericho area.
46.	Soaps, perfumes, cosmetics and other toilet preparations				
	(a) Expansion of capacity	2,000	2,000	-	Expansion of capacity planned by existing firms.
	(b) Small scale units	500	500	-	Under KIE programme, some sponsored by ICDC.
47.	Manufacture of rubber products				
	(a) New tyre plant	5,000*	-	-	Another tyre plant will be established during this Plan.
	(b) Expansion of capacity	4,000	4,000	-	Expansion of capacity of an existing firm.
	(c) Rubber Products	400	400	-	Potential project.
48.	Manufacture of plastic products				
	(a) New plant	800	800	-	Planned. To produce baby bottles.
	(b) Expansion of capacity	460	406	-	Expansion of existing firms.
NON-METALLIC PRODUCTS					
49.	Manufacture of pottery, china and earthenware	331	331	-	Expansion of capacity of an existing firm, through ICDC. Another project to manufacture ceramic tiles may come up towards the end of the Plan.
50.	Glass and glass products				
	(a) Sheet glass plant	5,000	-	-	Only part (about K£,000,000) of this investment may actually be invested during this plan period.
	(b) Hollow glassware	900*	-	-	Extension of the existing glasswork units.
51.	Structural clay				
	(a) Bricks and roof tiles project	200	200	-	To be located in Kakamega area. ICDC investing this project.
	(b) Expansion of capacity	200	200	-	A Nairobi based plant has plans to expand its capacity and also extend its activities to Mombasa.
	(c) Others	287	287	-	Small plants will be promoted in rural areas.

52. Cement, lime and plaster				
(a) Cement plant	7,210*	-	-	Potential project. To be located in W. Kenya region. ICDC plans to participate in this project which is estimated to cost about K£30,000,000 when completed.
(b) Expansion Programme	7,000	7,000	-	An expansion programme by existing firms.
53. Non-metallic products n.e.c.	2,065	2,065	-	
BASIC METAL INDUSTRIES				
54. Basic metal industries				
(a) Mini integrated steel plants	20-25,000	-	-	Proposal under study. (Part of this investment to be made after the plan period. Government may participate if the project is viable.
(b) Pumps project	800	800	-	A potential project. It will meet the needs of the small scale irrigation schemes and water supply activities once established.
(c) Foundry	5,000*	-	-	Potential project at Mombasa.
(d) Tin plate plant	20,000	-	-	A potential project which could be integrated with the mini steel project or as a separate activity. Most of this investment will be carried forward into the next development plan.
(e) Press shop	500	500	-	This is a potential project for simple automobile body components or for other engineering industries.
FABRICATED METAL PRODUCTS, MACHINERY AND EQUIPMENT				
55. Cutlery, handtools and general hardware				
(a) Handtools	250	250	-	Potential projects.
(b) Cutlery	75	75	-	
(c) Cutting saw blades for metal and wood - manual and circular	75	75	-	
(d) Agricultural and garden implements	64	64	-	Potential rural project.

56.	Metal furniture and fixtures	1,445	1,445	-	Expansion programme of the existing firms and new small-scale enterprises will come up during the period.
57.	Structural metal products	542	542	-	Potential project.
58.	Fabricated metal products				
	(a) Gas cookers	250	250	-	Expansion of an existing project.
	(b) Precision screws, bolts and nuts	376	376	-	)
	(c) Valve fittings	300	300	-	) Potential projects.
	(d) Malleable pipe fittings	300	300	-	)
	(e) Metal containers and tin cans	2,700	2,700	-	Expansion programme of an existing firm in Nairobi.
	(f) Wire products	210	210	-	
	(g) Sanitary ware, bath tubs, enam. iron manuf.	750	750	-	Potential projects.
	(h) Others	1,020	1,020	-	These include: malleable pipe fittings and valve fittings etc.
59.	Manufacture of machinery except electrical				
	(a) Machine tool plant	4,200	-	-	To manufacture low cost simple machines for heavy engineering and precision work.
	(b) Rural service centres and agricultural machinery repair shops	1,000	1,000	-	Rural project.
60.	Electrical machinery and apparatus				
	(a) Electric motors	5,000	5,000	-	Potential project.
	(b) Iron clad switches, switchgears and starters (low voltage)	300	300	-	Potential projects in which ICDC may get involved.
	(c) Transformers - 11 KVA and below	300	300	-	

(d) Radio television and communication equipment and apparatus	2 335	2 335	Expansion programme of an existing firm in Nairobi
(e) Electric home appliances including hot plates toasters fans electric irons and tea kettles etc	1 000	1 000	Potential projects ICDC may invest in some of them later during the plan period
(f) Dry battery cells	800	800	
(g) Fixtures sockets condensers for tube lights	500	500	
(h) Low tension electric insulators including pin insulators disc and shackle insulators	129	125	Potential projects
(i) Electric cables and conductors	400	400	
61 Repair works in shipping railway road and air transport	2 965	2 965	Expansion in capacity for repair shops
62 Assembly of motor vehicles	2 482*		Expansion programme of the existing firms
63 Motor cycles and bicycles	96	96	Potential project
64 Manufacture of professional and scientific equipment photographic and optical goods	46	46	Investment in this industry is to be of small scale nature
OTHER MANUFACTURING INDUSTRIES			
65 Other manufacturing industries	11 280	-	This group comprises numerous firms producing a wide variety of items not classified under any of the above subsectors

*NOTE: In some cases only the total investment figure is indicated as the private/public investment ratio was not yet known at the time of publishing this document

Erratum: Project No 35 should be in the Paper and Paper Products Printing and Publishing groups

ANNEX II

KENYA: ORIGIN OF TOTAL IMPORTS, 1972-1976, K£'000

	1972	1973	1974	1975	1976
E.E.C.					
United Kingdom	54,301	57,137	71,123	75,707	77,043
West Germany	17,485	20,933	38,515	29,186	40,974
Italy	8,096	8,419	12,849	9,968	10,820
France	7,253	6,818	13,117	13,284	12,914
Netherlands	5,028	8,194	14,587	7,429	9,601
Other	5,321	5,307	8,995	9,441	11,645
TOTAL	97,484	106,807	159,186	145,015	162,997
Other Western Europe Total	9,614	11,853	20,501	17,978	19,621
Eastern Europe Total	4,219	5,847	10,903	3,496	3,742
U. S. A.	12,621	17,259	21,577	25,556	23,672
CANADA	1,406	3,838	2,814	5,799	6,270
AFRICA					
Tanzania	6,196	8,528	10,686	9,166	12,406
Uganda	7,706	4,860	3,843	1,486	818
Zambia	383	604	1,996	549	824
Other	2,285	1,740	2,206	1,461	2,546
TOTAL	16,570	15,732	18,731	12,662	16,594
MIDDLE EAST					
Iran	14,138	15,114	36,528	51,355	68,381
Other	4,754	4,702	34,971	32,261	28,997
TOTAL	18,892	19,816	71,499	83,616	97,378
FAR EAST AND AUSTRALIA					
Australia	3,722	2,243	2,187	5,666	2,211
Japan	18,182	27,125	41,954	31,384	45,034
India	4,232	4,346	6,763	6,379	7,922
China (Mainland)	1,219	1,677	4,627	2,836	3,055
Other	6,210	9,172	16,010	10,541	17,492
TOTAL	33,565	44,563	71,541	56,806	75,714
All other countries	2,957	2,574	6,853	11,435	353
Parcel Post and Special Transactions	523	263	270	223	656
TOTAL	197,851	228,552	383,875	362,586	406,997

Source: Economic Survey 1977, p.75

ANNEX III

KENYA: DESTINATION OF TOTAL EXPORTS*, 1972-1976 K£'000

	1972	1973	1974	1975	1976
E.E.C.					
United Kingdom	20,392	20,622	18,700	22,691	36,072
West Germany	9,480	13,571	17,874	19,189	42,123
Italy	2,909	3,687	4,440	5,771	13,874
France	724	1,460	1,863	1,459	3,415
Netherlands	6,989	8,096	11,445	7,477	17,052
Other	1,769	4,380	10,582	4,407	6,349
TOTAL	42,263	51,816	64,904	60,994	118,885
Other Western Europe Total	7,319	11,110	11,637	11,287	21,012
Eastern Europe Total	1,437	2,256	2,968	2,301	3,301
U. S. A.	5,491	7,532	8,028	8,409	18,378
CANADA	1,753	2,706	3,329	5,039	6,096
AFRICA					
Tanzania	19,428	22,227	25,949	28,540	33,442
Uganda	17,832	29,557	39,676	32,910	33,162
Zambia	4,976	7,282	10,913	8,218	9,018
Other	9,837	13,054	19,345	25,390	32,227
TOTAL	52,073	72,120	95,883	95,028	107,849
MIDDLE EAST					
Iran	623	592	331	964	955
Other	1,725	3,048	4,297	4,619	5,040
TOTAL	2,348	3,640	4,628	5,583	5,995
FAR EAST AND AUSTRALIA					
Australia	769	670	1,140	1,740	1,393
Japan	2,093	5,031	5,364	6,333	4,551
India	2,378	1,587	2,820	2,862	2,545
China (Mainland)	1,618	3,070	1,787	1,402	413
Other	3,001	6,856	10,874	7,503	17,295
TOTAL	9,859	17,214	21,985	19,840	26,197
ALL OTHER COUNTRIES	2,484	5,271	8,200	10,884	13,653
AIRCRAFT AND SHIPS STORES	7,688	7,047	14,139	18,617	23,696
ALL EXPORTS	132,714	180,712	235,697	237,982	345,062

* Excluding gold and currency but including re-exports.
Source: Economic Survey 1977, p.76